



NOAA - National Weather Service

Tampa Bay Area

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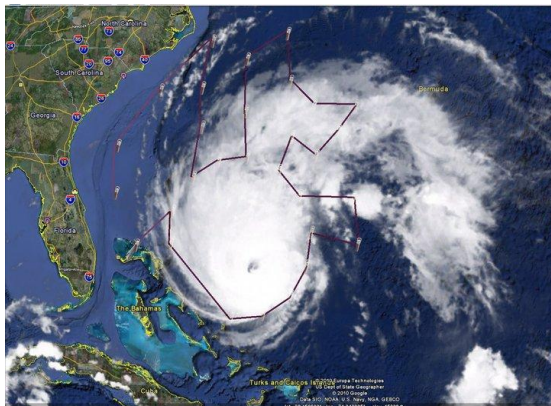
Hurricane Earl Surveillance Mission



NOAA's Aircraft Operations Center (AOC) located at MacDill Air Force Base is well known for flying into hurricanes to collect essential data. But did you know that the AOC also flies surveillance missions on a hurricane's periphery to gauge the storm's next move? On September 1, a couple days before Earl started impacting the Mid-Atlantic States, NWS Forecaster Todd Barron joined the crew on the Gulfstream IV (nicknamed "Gonzo") to assist in the data acquisition. At a flight level of 40,000-45,000 ft, approximately 35 data instruments

(called dropsondes) were released on the edges of Hurricane Earl.

The data that gets collected measures wind speed and direction, temperature, humidity, and pressure. After the data is processed on board the GIV, it is sent out to be used by the forecast models. Anytime the forecast models are provided with a higher density of observations, their accuracy is likely to increase. Knowing what's going on right now is essential to know what will happen in the coming days.



Track around Earl. 4,000 miles and 8.5 hours.



On the south side of Earl looking towards the eye wall convection.



Sun setting on Hurricane Earl

Contact: Todd Barron

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